

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended) An apparatus for thin-layer metrology of semiconductor substrates, comprising:

at least one cassette element for the semiconductor substrates,

a first measurement unit for thin-layer micrometrology,

a transport mechanism being provided between the cassette element for the semiconductor substrates and the first measurement unit for thin-layer micrometrology, and

a measurement unit for thin-layer macrometrology, wherein the measurement unit for thin-layer macrometrology is positioned in a the region of the transport mechanism, after the cassette element and before the first measurement unit for thin-layer micrometrology,

wherein the first measurement unit for thin-layer micrometrology comprises a microphotometer and a microellipsometer.

2. (Original) The apparatus as defined in Claim 1, wherein the apparatus for thin-layer metrology of semiconductor substrates is enclosed by a housing, the housing defining a basal area.

3. (Currently Amended) The apparatus as defined in Claim 2, wherein the first measurement unit for thin-layer micrometrology and the measurement unit for thin-layer macrometrology are arranged within the housing of the apparatus in such a way that the basal area is no larger than the basal area of an apparatus for thin-layer metrology that contains only a measurement unit for thin-layer micrometrology.

4. (Canceled).

5. (Canceled).

6. (Currently Amended) The apparatus as defined in Claim 1, wherein the measurement unit for thin-layer macrometrology comprises encompasses a macrophotometer.

7. (Currently Amended) The apparatus as defined in ~~any of~~ Claim 1, wherein the transport mechanism comprises ~~encompasses~~ a feeder that transports the semiconductor substrates from the cassette element to the first measurement unit for thin-layer micrometrology.

8. (Currently Amended) The apparatus as defined in Claim 1, wherein in the apparatus for thin-layer metrology, the semiconductor substrates are pullable with a ~~the~~ feeder out of the cassette element for delivery into the first measurement unit for thin-layer micrometrology, the semiconductor substrates being guidable ~~along~~ beneath the measurement unit for thin-layer macrometrology; and measured values being automatically acquirable ~~in that context~~.

9. (Original) The apparatus as defined in Claim 1, wherein the semiconductor substrates are wafers.

10. (Currently Amended) A method for thin-layer metrology comprising the following steps:

[[[-]]] transferring semiconductor substrates out of at least one cassette element to a measurement unit for thin-layer micrometrology, the semiconductor substrates being guided ~~along~~ past a measurement unit for thin-layer macrometrology;

[[[-]]] determining, at the measurement unit for thin-layer macrometrology, measurement locations on the semiconductor substrates that indicate defects that ~~and~~ must be examined more closely;

[[[-]]] transferring the identified measurement locations to a computer; and

[[[-]]] traveling to the identified measurement locations and performing a detailed measurement with the measurement unit for thin-layer micrometrology,

wherein the measurement unit for thin-layer micrometrology comprises a microphotometer and a microellipsometer.

11. (Original) The method as defined in Claim 10, wherein the measurement locations identified in the determination step are used as a preselection of the semiconductor substrates to be measured with the measurement unit for thin-layer micrometrology, the

measurement location for the measurement unit for thin-layer micrometrology being transferred automatically.

12. (Original) The method as defined in Claim 10, wherein further semiconductor substrates are delivered to the measurement unit for thin-layer macrometrology while a semiconductor substrate is being assessed microscopically in the measurement unit for thin-layer micrometrology.

13. (Currently Amended) The method as defined in Claim 10, wherein the determination of the measurement locations on the semiconductor substrates by ~~means of~~ the measurement unit for thin-layer macrometrology supplies measured values that are used, by way of an evaluation of defined monitoring thresholds, for a decision as to whether and at which microscopic points on the semiconductor substrate measurements are to be performed with the measurement unit for thin-layer micrometrology.

14. (Canceled).

15. (Canceled).

16. (Currently Amended) The method as defined in Claim 10, wherein the measurement unit for thin-layer macrometrology comprises ~~encompasses~~ a macrophotometer.

17. (Currently Amended) The method as defined in Claim 10, wherein the transfer of semiconductor substrates out of the at least one cassette element to the measurement unit for thin-layer micrometrology is performed with a transport mechanism, the transport mechanism comprising ~~encompassing~~ a feeder.

18. (Currently Amended) The method as defined in Claim 10, wherein the measurement locations determined in the measurement unit for thin-layer macrometrology and the corresponding measurement locations in the measurement unit for thin-layer micrometrology are related by ~~means of~~ coordinate transformation.